

REMARKS:

This preliminary amendment is to be considered in view of the RCE filed concurrently herewith, and in response to the final office action mailed on July 8, 2005 which rejected claims 1-8 and objected to claims 10-12. The Examiner deemed claims 10-12 allowable if rewritten into independent format, which has been done.

Claims 1-8 had been rejected on obviousness grounds and in response, claim 1 has been amended to more particularly point out and distinctly claim the invention for which protection is being sought, namely by adding the limitations of “spherically” “and longitudinally exterior from the brake assembly towards the wheel hub.” The latter added recitation is supported by the specification throughout, for example by the description of location of the bearing with respect to a brake assembly shown in Fig. 1. Accordingly, no new matter has been added.

Claims 1 – 8 and 10 - 12 are pending.

ARGUMENTS AND AMENDMENTS IN RESPONSE TO THE JULY 8, 2005 OFFICE ACTION:

REJECTIONS UNDER 35 U.S.C. § 103:

CLAIMS 1 - 8

Claims 1 - 8 stand rejected under 35 U.S.C. 103(a) over Jirousek et al. (US 4,317,498) in view of Kingston (US 6,090,006) and Forster (US 5,813,938).

In asserting this rejection, three separate prior art references had to be combined. However, that combination failed to include the claim element of “one row of balls arranged along a circular track.” Forster (12’, 13’) does not show ball bearings (see Fig. 3) but instead, “annular roller bearings” (column 2 line 54, column 3 lines 13-14).

This lack of ball bearings in the cited art is significant for several reasons. Prima facie obviousness is lacking because claim one recites this missing element. To make this distinction more clear, the term “spherical” has been added to claim 1. Roller bearings, which have a rotation axis, are in fact used differently in the cited art. The cited Kingston ‘006 and Forster and Jirousek art in each case use two spaced-apart sets of bearings, but proportionally closer to the rotation axis and thus perform differently. In this context, the location with respect to the braking forces is important and differs from the cited art with the claimed bearings recited as being located towards the hub from the braking forces.

An advantage of the claimed invention, namely, greater simplicity and lower cost, arises in part from use of a single race track that desirably is located further out from the axis for greater stability, obviating at least part of the reason for needing two sets of bearings. Further, use of bearing axis’s that distribute force at oblique angles with respect to the rotation axis, as clearly shown in Kingston ‘006 and Forster, relates to a different kind of stability. In contrast, the spherical bearing balls as claimed can circulate. All ball surfaces wear similarly and force distribution of force (no thrust bearing for example) differs. The additional feature of locating the claimed ball bearing race track “longitudinally exterior from the brake assembly towards the wheel hub” describes one such element that additionally differs from the three cited references.

Because amended claim 1 (and claims 2-8 dependent thereon) recites 1) spherical ball bearings and 2) a different, functionally important placement of the bearings, which are missing from the cited references, prima facie obviousness is lacking. Reconsideration and allowance of the claims is respectfully requested.

CLAIMS 10 - 12

Claims 10-12, which depend on claim 1 were objected to in the final office action as being dependent on a rejected claim. Applicant has incorporated the text of claim 1 into claim 10 as suggested by the Examiner. Claims 11 and 12 depend from now-allowable claim 10.

Applicants respectfully request formal allowance of amended claim 10 and claims 11-12.

Applicant has made an earnest attempt to respond to all the points included in the last office action by preliminary amendment and argument. Consideration of the amended claims and notification of allowance of all pending claims are earnestly solicited.

Serial No.: 10/709,480
Confirmation No.: 1683
Applicant: KINGSTON, Timothy
Atty. Ref.: 07589.0164.PCUS00

The undersigned representative requests any extension of time that may be deemed necessary to further the prosecution of this application.

The undersigned representative authorizes the Commissioner to charge any additional fees under 37 C.F.R. 1.16 or 1.17 that may be required, or credit any overpayment, to Deposit Account No. 14-1437, referencing Order No. 07589.0164.PCUS00.

In order to facilitate the resolution of any issues or questions presented by this paper, the Examiner should directly contact the undersigned by phone to further the discussion.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Tracy W. Druce". The signature is fluid and cursive, with the first name "Tracy" and last name "Druce" clearly distinguishable.

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